

# St. Louis Regional Economic Adjustment Strategic Plan

## Executive Summary

Prepared for:

St. Louis County Economic Council  
State of Missouri  
City of Fenton

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## Overview

AECOM Technical Services Inc. (AECOM) was engaged by the partnership of the St. Louis County Economic Council, the State of Missouri and the City of Fenton to evaluate the Regional economic impact caused by the closure of Chrysler's Fenton assembly operation and to recommend adjustment strategies for Regional recovery from the essential collapse of the local vehicle assembly sector, which has lost more than 20,000 jobs since 1997. Our approach included study of economic data, as well as interviews with over 100 civic, public, private, and institutional stakeholders involved in economic and workforce development. The analysis is also supported by AECOM's experience in other metropolitan areas that have been hard hit by auto industry restructuring.

It is clear that the economic damage to the Region due to the loss of Chrysler is extensive, with a total loss of over 40,000 jobs (direct, indirect, and induced) and over \$15 billion in lost output. Combined with the effect of the recession, the Region experienced a total loss of almost 70,000 jobs since 2007. While the Region has been resilient in responding to past economic challenges, the severity of the impact caused by Chrysler is a call to action, and the need for determined, sustained and Regionally-supported efforts is apparent.

Our recommendations for the Region were informed by the following observations:

- The Region's self image which is at times surprisingly negative
- The challenge of local governance post-recession, with limited financial resources, political polarization, and disparate views about priorities
- The deteriorating condition of Regional infrastructure assets will diminish the Region's competitive position if nothing is done to address key problem areas
- The need to focus greater resources on business retention and expansion
- The Region's extent of fragmentation in economic development, with an array of organizations and leaders who function in different capacities with varied constituencies

The local tradition of siloed and fragmented thinking with regard to economic development is a major hindrance, preventing the Region from living up to its economic potential. If the Region is to recover from the loss of Chrysler and expand its participation in the global economy, a more deliberate and inclusive approach to economic development is needed. Core recommendations are:

- Build on Regional capacity in advanced manufacturing, Plant and Life Sciences and Clean Tech, clusters which are clear federal economic development priorities
- Streamline and improve resources to assist entrepreneurs and small businesses
- Enable local companies to better penetrate global markets
- Address critical infrastructure needs to sustain long-term economic growth
- Organize and align workforce training with business retention and expansion efforts
- Improve Regional economic development collaboration and leadership
- Enhance St. Louis City/St. Louis County collaboration

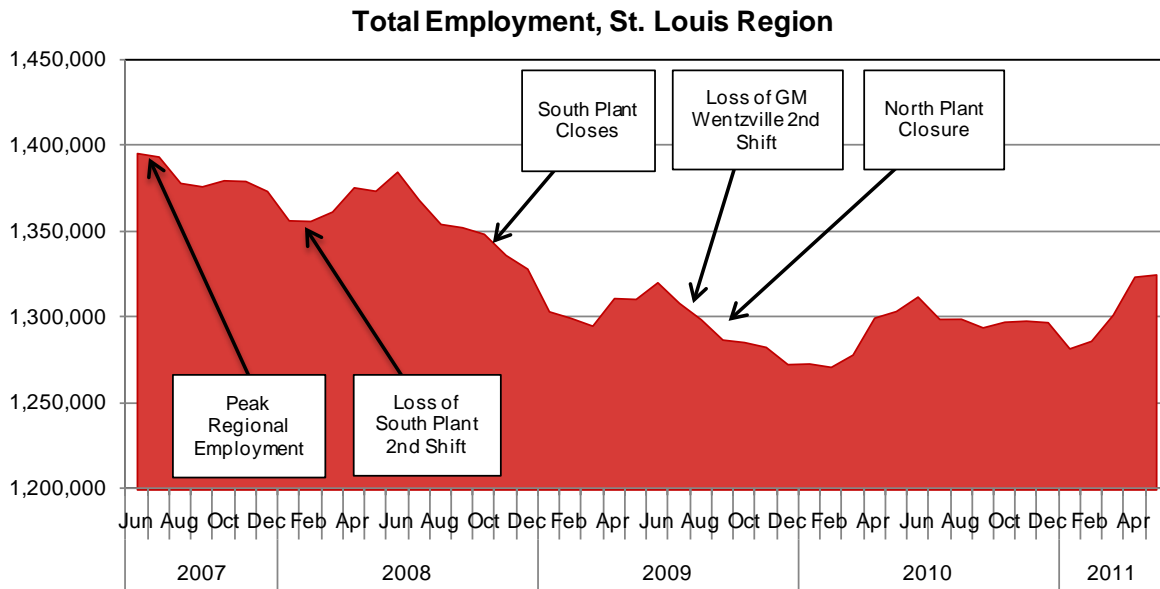
Further detail supporting these recommendations is contained in the body of the report.

## Introduction

In 2010, the Partnership of St. Louis County Economic Council (SLCEC), the Missouri Department of Economic Development and the City of Fenton received a grant from the US Economic Development Administration to develop a Regional Economic Adjustment Strategy (the “Strategy”) to address the economic impact caused by the closure of the North and South Assembly Plants formerly owned by Chrysler LLC. AECOM and Vector Communications were engaged to complete this Strategy, using a multidimensional approach which included identification of economic, fiscal, and real estate impacts on the 16-county St. Louis Metropolitan Area (the “Region”) caused by the closure.

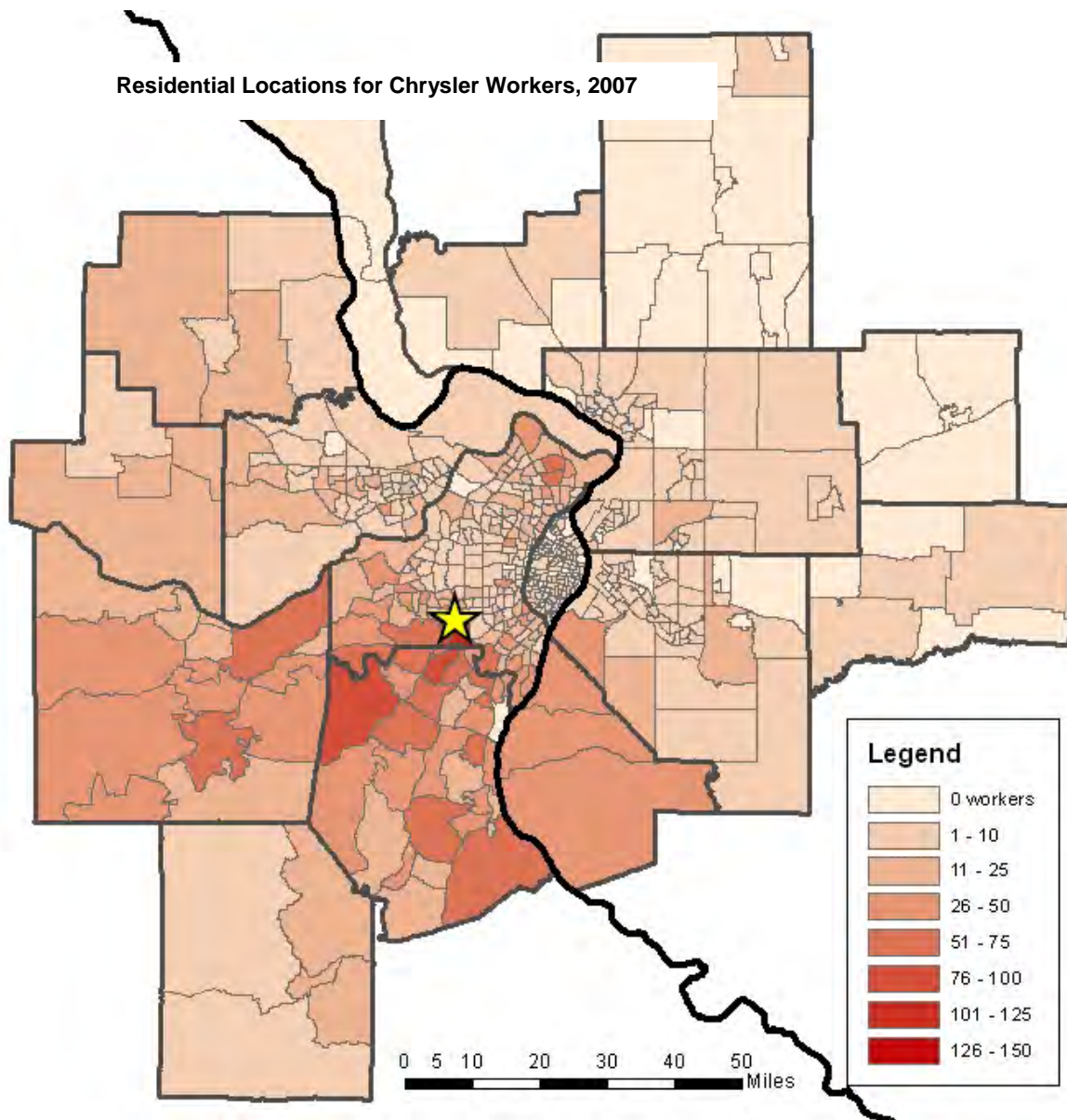
Interviews were conducted with civic, public, private, and institutional stakeholders to clarify perceptions, issues, and opportunities that shaped the Strategy. Extensive analysis of local, state, and national economic data was undertaken to clarify trends and opportunities. The analysis has framed recommendations for how the Region can recover and reposition for future growth, building on organizational assets and industries that are best positioned to contribute to future growth.

The economic damage caused by the closure of Chrysler’s North and South Plants in 2008 and 2009 was dramatic, and led to the loss of 6,365 on-site jobs, direct wages of about \$880 million, and total output associated with the two plants of \$15.5 billion. The ripple effect of the plant closures extended across the Region, resulting in a loss of 37,485 indirect and induced jobs (computed using IMPLAN), for a total loss of over 40,000 jobs. The indirect job losses included about 2,500 actual jobs at local supplier companies, many of which had been gearing up as part of Chrysler’s 2005 announcement to invest \$1 billion in both plants; by the end of 2009 all of this activity had ceased.



While job losses were concentrated in St. Louis County and Jefferson County, other counties in Missouri and Illinois were impacted (see Residential Locations for Chrysler Workers map on the following page).

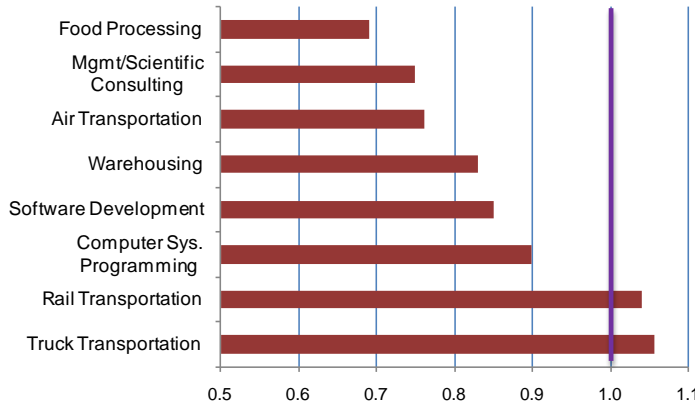
The collapse of Chrysler must also be viewed in context with the broader Regional decline in automotive assembly employment since 1997, during which the Region lost nearly 20,000 jobs, placing the loss of Chrysler on a par with other major economic challenges the Region has faced since the 1970’s.



### **Regional Industry Sector Analysis**

Using IMPLAN, an industry standard analysis program, AECOM evaluated over 400 industry sectors that power the Regional economy, covering traditional sectors as well as evolving industry clusters, including Plant and Life Sciences and Clean Tech. A location quotient (LQ) analysis was used to compare the percentage share of employment in each sector to total employment in the Region, which is then compared to national averages, using 2009 data. Sectors with a LQ ratio greater than 1.0 are more significant locally compared to the nation. In general, higher location quotients point to industry sectors which are more integrated in the local economy, and have a greater influence on job creation. A sample of the sectors evaluated in the analysis follows:

### Sectors Needing Improvement



**Key Factors:**

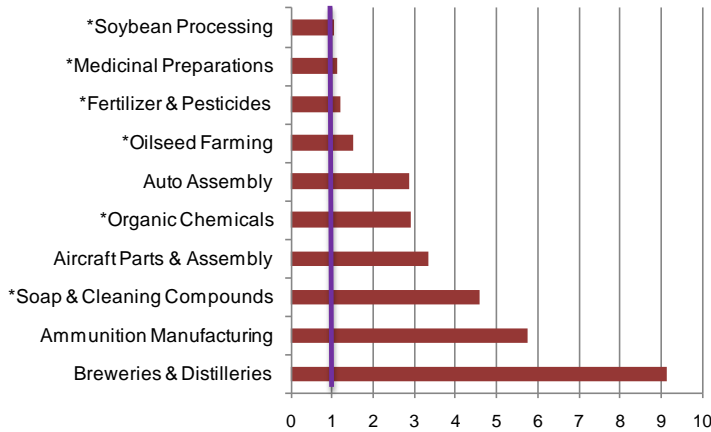
These sectors have an average Location Quotient of 0.86, and support about 75,000 jobs, with output per job of about \$300,000

Air transportation reflects the loss of hub status at Lambert

Rail and truck transportation could be stronger

Food processing (excluding breweries) could be stronger

### Manufacturing Sectors



**Key Factors:**

These sectors have an average Location Quotient of 3.35 and support about 30,000 jobs,

Average output per job is about \$965,000 - five times that of services.

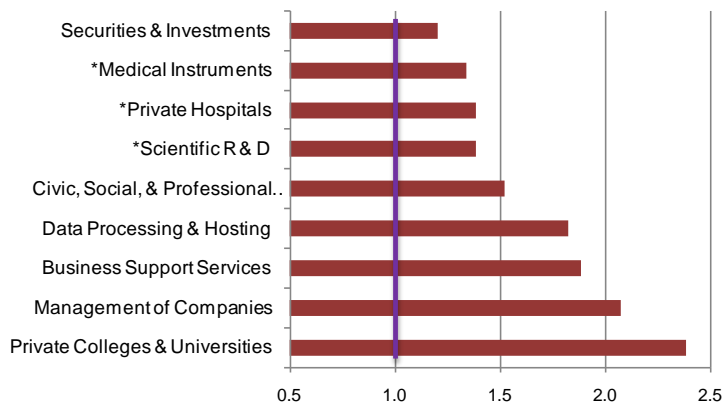
Six sectors are part of Plant and Life Sciences

Aircraft assembly is critical to the region

General Motors continues to assemble vans in Wentzville, sustaining a trained workforce

Breweries and distilleries remain important

### Strong Sectors



**Key Factors:**

These sectors have an average Location Quotient of 1.6, and support about 235,000 jobs, with output per job of about \$165,000

Three sectors are part of Plant and Life Sciences

All sectors are focused on service delivery, with lower resulting output per worker

Private colleges and hospitals support about 60,000 jobs

\* = part of Plant and Life Sciences Cluster



The Location Quotient analysis led to the following core findings:

- The Region’s strongest sectors for employment are in educational, medical, and financial services; however, these sectors have significantly lower total output per job compared to manufacturing.
- Identified Plant and Life Sciences related sectors (identified above with an “\*\*”) support about 88,000 jobs with an average LQ of 1.83, well above national averages.
- Apart from breweries and distilleries, food production should be expanded, particularly with the Region’s access to fresh water sources.
- Although manufacturing employment is a modest share of total Regional employment, output per worker is more than five times greater than in the services sector. Higher output per worker is driven by greater integration with suppliers and supply chains, with each step adding value to the manufacturing process.
- Despite the loss of Chrysler, the Regional auto assembly sector remains viable, as evidenced by the recent announcements by Emerald Automotive and General Motors. Emerald Automotive announced that it has selected St. Louis as a location for a future plant for assembly of hybrid electric vans. More recently, GM announced that it would expand its Wentzville assembly site for production of a new mid-sized truck, creating an estimated 1,850 jobs beginning in 2012.
- Although rail, truck, and air transportation make up a modest share of Regional employment, these sectors have a profound impact on the economy. An efficient and cost effective system for movement of goods between modes would be a very strong asset, given the Region’s central location in the country.

## Stakeholder Interviews

Interviews were conducted with over 100 people representing more than 80 entities and organizations involved in civic, economic and workforce development across the Region. The interviews focused on both the impact of the loss of Chrysler, and how the Region can adjust economically to the loss of over 40,000 jobs. The interviews highlighted perceptions, issues, and opportunities that will influence the recovery and adjustment process. These insights were evaluated and prioritized based on AECOM experience, considering facts, perceptions, and biases to arrive at specific observations:

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>Diverse economic base</li> <li>Impressive cultural amenities</li> <li>Importance of quality of life</li> <li>Competitive cost of living</li> <li>Concentration of PhD Level research</li> <li>Plant and Life Sciences, Aerospace, Financial Services</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>Traditional over-reliance on larger firms</li> <li>Achievement gap - High school dropout rates</li> <li>Insufficient long-term job growth</li> <li>State leadership and the Metro vs. Rural debate</li> <li>Underinvestment in Regional logistics infrastructure</li> <li>Lambert and Mid-America Airports have financial challenges</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>Manufacturing employment is recovering</li> <li>The Region has private wealth</li> <li>Leadership transitions at key regional ED organizations</li> <li>Strong educational institutions - Wash U, UMSL, SLU, others</li> <li>Positive and improving City - County relationship</li> <li>New Mississippi River Bridge will improve access</li> <li>Growing export markets in Asia</li> </ul>	<p><b>Challenges</b></p> <ul style="list-style-type: none"> <li>More units of government per capita / fewer resources</li> <li>Fragmented governance - local, state, and federal</li> <li>Fragmented economic development leadership</li> <li>A history of racial tension</li> <li>Higher fuel prices</li> <li>Shrinking public sector finances</li> <li>Refocus ED funding for business retention and expansion</li> </ul>

## AECOM Observations

- Although the Region is currently one of the 20 top US metropolitan areas, its rate of long-term growth has not kept pace, such that by 2030, the Region is projected to fall out of the top 20 if accelerated progress does not occur.
- The Region's perceived satisfaction with the status quo and surprisingly negative self-image is troubling and also ironic, given its significant cultural and economic assets.
- Both the State and Region appear reluctant to adjust purposefully to what is an increasingly global economy, where the claim of being "low cost" is no longer compelling.
- That the Region has been able to grow at all is remarkable, given the array of constraints created by fragmented and parochial local, state, and federal jurisdictional boundaries that exist across the Region.
- Research by institutions such as the Brookings Institution shows that metropolitan areas drive the majority of US job growth. Effective coalition building with other metros in Missouri and Illinois could increase collective influence on legislative issues that align with broader Regional interests.
- The current Regional economic development framework is a challenge, with an array of entities (RCGA, individual counties and cities, Civic Progress, RBC, Metro, East-West Gateway, etc.) that function in different capacities with varied constituencies.
- The Region's economic development structure has found ways to work cooperatively, as evidenced by the formation of the Great Rivers Greenway District, the Zoo Museum District, and recent voter approval of a sales tax increase to fund Metro maintenance and expansion.
- The Region needs to upgrade its benchmark metropolitan areas. Cities such as Boston, Minneapolis, Denver, and Dallas are as appropriate as Columbus, Indianapolis, and Memphis.
- Regional leaders need to be mindful that people outside the Region (e.g., site selectors) do not recognize organizational and municipal boundaries, and that irrational competition across such boundaries is counterproductive at a Regional level.

Historically, the Region has exhibited a measure of resiliency through 2007 in responding to a series of major economic setbacks, including the stockyards closure in East St. Louis (1970's), auto / manufacturing losses (1980's), and defense adjustment (1990's). However, with the beginnings of economic recovery now underway, ***it is clear that the Region has arrived at an economic development crossroads, where relying on the status quo will lead in the direction of under-performance and insufficient growth, and more proactive strategies will require very deliberate decisions about how organizations, leadership, and resources can be realigned to encourage Regional economic growth.*** Specific priorities include:

- Ensure that the Region can sustain an environment that is conducive to new business formation
- Preserve the Region's rich quality of life which is attractive to businesses and their workforce
- Capitalize on existing Regional assets in the Plant and Life Sciences and evolving strengths in Clean Tech to rebuild advanced manufacturing through legislative initiatives such as MOSIRA.
- Support small businesses through expanded export opportunities and workforce training, as well as streamlined and better-promoted support services.
- Restructure economic development toward a more Regionally cohesive platform, anchored by county-level leadership in business retention and expansion.

## Insight

AECOM's recommendations are built on experience across the country in cities that have been forced to adjust to the loss of a major employer, including cities impacted by auto industry restructuring and military base / BRAC realignment. Our experience also reinforces the importance of managing three specific themes:

**Recovery:** Between December of 2007 and June of 2009 the US economy endured the longest stretch of economic decline since World War II, making comparisons with the Great Depression (1929-1933) relevant. While signs of recovery are emerging, clear public sector fiscal challenges have made it difficult to separate politics from policy at the national and state levels. For the Region, fiscal stress has led to a measure of self-interest by municipalities, a perspective which constrains the Region's ability to recover.

**Boomer Retirements:** Over the past 50 years, the Baby Boom generation has exerted an outsized influence on the nation. With their retirement savings and home values reduced, many Boomer households are now delaying their retirement and are electing to remain in the workforce. For the Region, which already supports an aging population, Boomer decisions will continue to influence demand for health care and workforce training needs.

**Higher Energy Prices:** Higher energy prices are now focusing serious attention on efficient transportation options for movement of people and freight. Higher energy prices are driving considerable investment toward an array of potentially transformative strategies related to renewable energy.

## Action Plan Recommendations

The St. Louis Regional Economic Adjustment Strategy has identified six goals that should become the basis for economic adjustment in the Region:

### 1. Sector Specific Research

AECOM noted the laudable success of the Region's Plant and Life Sciences cluster, which was established and grown by a deliberate, well-funded and supportive network of collaborative organizations and institutions. Plant and Life Sciences sectors include agricultural feed stocks and chemicals (including bio-fuels); drugs, pharmaceuticals, medical services, and medical devices; and research, testing, and medical labs. Similar opportunities are now emerging locally in the Clean Tech cluster, which includes industries such as recycling, renewable energy, energy storage, and green chemistry; information technology; and green transportation

Through supportive federal policy, research efforts in Plant and Life Sciences and Clean Tech are converging. There is considerable research focused on alternative energy (biofuels) and energy storage, with linkage to other industries such as agricultural products and chemicals, as well as research and testing, human / animal health, diagnostics, and plant sciences. With these overlaps in mind, we identified several areas for deeper investigation, focused on ways to expand evolving linkages between sectors:

- Build on recent announcements related to the formation of BioSTL, which will be supported by \$30 million in committed funding from entities that include Washington University, BJC HealthCare, and the St. Louis Life Sciences Project. Funding will be used to support pre-seed and seed investments in the biosciences.
- Evaluate Regional opportunities in emerging fields related to advanced manufacturing, materials, and alternative energy, beginning with local firms such as Zoltek, MEMC Electronic Materials, GKN and Boeing. Other areas of focus should include wind power logistics and manufacturing support.
- Explore how the Region's available supply of fresh water and considerable logistical connections can be used to grow a more vertically-integrated food processing sector.

- Evaluate how existing Regional capacity in Information Technology can be used to grow opportunities in bioinformatics. Firms in the Region such as Intuitive Genomics, now located at BRDG Park, are actively shaping the space where computer science, information technology, biology and medicine are converging.

## **2. Entrepreneurial / Small Business Development / Export Opportunities**

AECOM's research has confirmed that the Region has traditionally been over-represented by large companies, and needs to adopt strategies to energize entrepreneurship and grow nascent companies that have potential to become new economic engines. Priorities include:

- Catalog all the Regional entities that are involved in entrepreneurship and develop a plan for enhanced easy access to existing area entrepreneurship resources. Educational institutions such as Wash U and SLU should be engaged.
- Evaluate the climate and capacity for entrepreneurial / small business development across the Region, defining local strengths and weaknesses, funding gaps and industry best practices.
- Missouri Enterprise and the Illinois Manufacturing Extension Service should have an important role in training and business development activities aimed at export markets. The future roles of these entities should be thoughtfully developed.
- Help local companies expand export opportunities to global markets, particularly in Asia and Latin America, building on experience with China Hub efforts.
- Research the technical feasibility of a large-scale Regional manufacturing incubator, and the potential role of local educational institutions in supporting the effort.
- Research the role and need for a civic champion to pursue additional "cluster" opportunities, using the existing Plant and Life Sciences cluster as a model.
- Conduct further studies to understand how evolving state legislation for MOSIRA can be used to support job creation in the Plant and Life Sciences and Clean Tech Clusters.
- Work with the Illinois and Missouri US Congressional delegations to determine whether existing district boundaries for organizations such as SBA, EDA, and FEMA can be redefined to better serve the Region.
- Work with local units of government to standardize planning and development regulations to ensure greater consistency and efficiency across jurisdictions.

## **3. Infrastructure Investments**

While the Region purports to be an impressive location for logistics, with four interstates, six Class 1 railroads, and two major rivers, our analysis confirms that the existing linkages between modes remain too arbitrary. The Region needs to think strategically about infrastructure investments now underway, with \$1 billion that has already been invested to upgrade rail capacity between Alton and Joliet (Illinois) for 110-mph passenger service and freight service. With an estimated cost of \$4.4 billion, the project raises questions for how the Region connects with this evolving asset, given the reported poor condition of both Mississippi River railroad bridges. Priorities include:

- There are several freight movement bottlenecks that need to be addressed, beginning with existing rail bridges over the Mississippi River. Similar bottlenecks in the Chicago area are now being resolved through the CREATE Program, as the railroad companies proved unable to address the issue themselves. St. Louis should consider a similar effort to improve connections between rail, truck and barge transport segments.

- Under a consent decree with US EPA, MSD has committed to invest \$4.7 billion to upgrade storm water and sanitary systems in the Region to meet terms under the Clean Water Act of 1972. Nationally, other cities have re-worked storm water management systems to expand recreational amenities and revitalize communities, with cities such as San Antonio and Kansas City being good examples.
- We note that the St. Louis Arch reinvestment project includes important infrastructure and transportation access enhancements. As Millennium Park in Chicago enabled significant additional real estate development and tourism, so too could the Arch project help transform the Riverfront area.
- Investigating ways to increase access to public transportation, particularly light rail and bus rapid transit. Analysis confirmed that less than 1% of Regional housing unit inventory falls within a 1/4-mile distance of current light rail stations. With inevitable growth in gas prices, demand for walkable housing will drive greater interest in higher density transit-oriented development sites.

#### **4. Workforce Development**

Workforce development remains a clear challenge for the Region, particularly the challenge of preparing young people for future careers while also ensuring that they actually have practical skills to enter the workforce. Recommendations focus on the current structure of workforce development in St. Louis City and St. Louis County, which clearly needs improvement:

- Build greater cooperation between St. Louis City and St. Louis County Workforce Investment Boards (WIB's) and intermediaries, including St. Louis Community College. Currently, St. Louis City and St. Louis County have separate WIB's, which creates an artificial barrier in Regional workforce efforts.
- Ensure that workforce development is aligned with the clear need for a focused business retention and expansion effort.
- Local companies need to be pulled into the workforce training process as partners. The success of Ranken Technical College in St. Louis is impressive in terms of linking corporate workforce needs with specialized training programs. The Ranken model should be a focus of further study and emulation.
- Sustain focus on early childhood education and support programs, as well as programs in math and science
- Further study of the applicability of Midwestern automotive adjustment programs such as the Automotive Manufacturing Technical Education Collaborative, which is an organization of educational institutions in communities across the country that have been impacted by auto industry restructuring.

#### **5. Regional Economic Development Leadership**

There is a clear need for a more integrated and collaborative Regional economic development structure aligned deliberately with business retention and expansion efforts. Opportunities begin with leadership transitions now underway at RCGA, Metro / Bi-State, and East-West Gateway. With these transitions occurring simultaneously for the first time in 20 years, and acknowledging that the current structure of Regional economic development is quite complex, it is clear that further in-depth research is needed to map out how the pieces of the Regional economic development puzzle can be better aligned to provide more seamless and integrated economic development services. Recommendations include:

- Continue to hold annual Regional economic development summits to set the agenda, identify priorities, develop funding strategies, and support follow-through.
- Enable the existing county-level economic development entities to prioritize Regional economic development around strategies to retain and grow existing businesses as a top priority. There is a clear

need for a cohesive Regional platform for capturing and presenting data regarding successful business expansion and retention efforts; current reporting is fragmented. County-level involvement in Regional marketing and job attraction should also be strengthened.

- While challenging fiscal conditions make it difficult to broaden economic incentives, consideration should be given to a temporary economic development sales tax to fund pressing infrastructure needs, workforce development improvements, and economic development / entrepreneurship efforts.
- The role of SLCEC's Economic Development Collaborative should be expanded as a mechanism for connecting with, and establishing common goals among, municipalities across St. Louis County.
- Conduct further research into the Bi-State Development Agency's ability to implement projects of Regional importance and provide collaborative economic leadership. Bi-State has the legal ability to implement truly Regional projects.
- Evaluate the RCGA's current role and financial support for providing external marketing and attraction services. As part of this evaluation, AECOM recommends that consideration be given to clearly separating the traditional chamber and economic development functions within RCGA.
- Re-engage with Metro East economic development leaders, to ensure their participation in efforts which move the entire Region forward.

## **6. Enhanced St. Louis City and St. Louis County Collaboration**

Enhanced collaboration between the City of St. Louis and St. Louis County must be a key outcome of this study. Our analysis, supported by 15 years of work experience across the Region, has reinforced two elements of prevailing wisdom. First, historically, there has been a general lack of cooperation and coordination between St. Louis City and St. Louis County in basic government services. Notable exceptions are the cooperation in functional areas such as the establishment of the Convention and Visitors Commission, Great Rivers Greenway, the Zoo-Museum District, the passage of the Metro sales tax and certain economic development initiatives. Second, it is clear that the City of St. Louis faces considerable structural challenges, including constrained financial resources as well as a fragmented and highly decentralized governance structure. With the outsized economic importance of St. Louis City and St. Louis County to the Region in mind, it is apparent to AECOM that these factors have combined to diminish the growth potential and competitive position of the Region nationally and globally.

For the near-term, this analysis reinforces the practical need for a more integrated St. Louis City/St. Louis County economic and workforce development platform, with the goal of aligning specialized workforce training with business retention and expansion. In a similar fashion, consideration should be given to implementation of a joint St. Louis City/St. Louis County geographic information systems (GIS) platform to better support planning and economic development efforts. As a first step, the City of St. Louis' GIS system needs to be improved to the level of St. Louis County's current GIS system which is highly advanced.

Over the long-term, significant attention needs to be focused on resolving fundamental structural, legal and financial challenges which the City of St. Louis faces. While it is clear that St. Louis City "re-entry" into St. Louis County (or other fundamental reorganization of government) will not address all of St. Louis City's fiscal challenges, our experience suggests that the status quo is equally untenable. The same is true for St. Louis County, which now finds itself in a fiscal position that the City of St. Louis enjoyed roughly 50 years ago. The logical extrapolation of current trends raises concern over St. Louis County's long-term ability to sustain its current standard of economic performance without fundamental change.

In total, if the Region is to be competitive as a metropolitan area in the future, substantive further cooperation between the two jurisdictions is imperative. For this reason, we would argue that the executive and legislative leadership of both the City and County of St. Louis should actively engage in a long-term and phased strategy for transforming the St. Louis City/St. Louis County relationship over the next 20 years.

### Conclusion

The St. Louis Regional Economic Adjustment Strategy has confirmed that several structural and organizational challenges effectively prevent the Region from living up to its economic potential. Some challenges are a result of federal policy; workforce development is a specific example. Other factors are uniquely local, linked with the distant history of the Region going back to the 1800's. While the challenges are clear, the solutions are complex, particularly in light of the diverse components of the local economy and the fact that the Region has lost a significant industry that needs to be replaced, likely incrementally, over time. Additional research is recommended to further explore some of our initial findings. Emphasis will be placed on deeper dives into specific areas where AECOM research shows that future economic growth is most promising and will best position the Region to replace jobs lost as a result of the closure of Chrysler's operations in Fenton.

